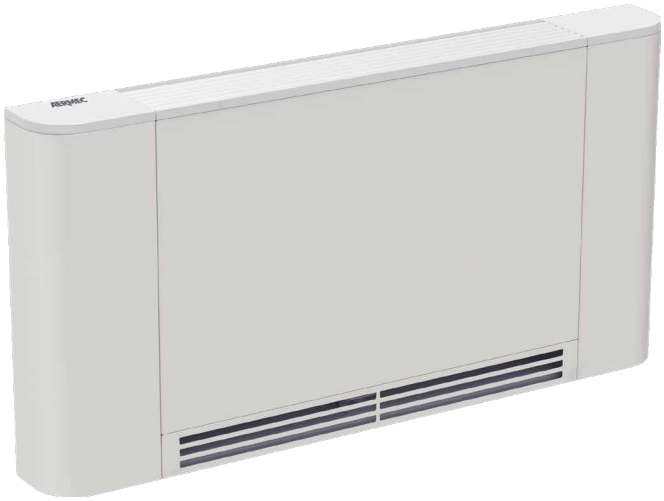
Omnia ULSI_B

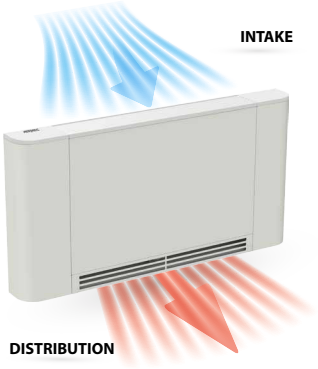
Vertical wall-mounting or free-standing installation

- **Compact dimensions, thickness 130 mm**
- **Low operating temperature**
- **Cooling, heating, and dehumidification**



DESCRIPTION

The Omnia Slim fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year.
They can be installed on any system with a 2-pipe system and it fits with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.



VERSIONS

ULSI_B Inverter without control with hydraulic connections on the left
ULSI_BR Inverter without control with hydraulic connections on the right

FEATURES

Case

Structure in sheet metal, 12/10 and 8/10 mm.
Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which guarantees maximum acoustic comfort.
The electric motor is a new generation Brushless with built-in driver and IP66 protection rating, continuously variable speed

Finned pack heat exchanger

With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

Control

Both versions are supplied without on-board control, however, various thermostats or control panels are available as accessories to be installed on board the fan coil unit or on the wall.

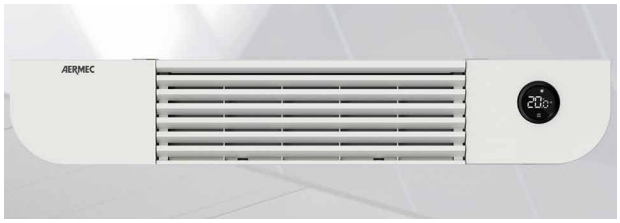
ACCESSORIES

Control panels and dedicated accessories

AER503IR: Flush-mounting thermostat with backlit display, capacitive key-pad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
DSKTS: Thermostat with an easy-to-read light display that provides clear information on room temperature, programming settings and more. Thanks

to the ergonomic ring nut switch, adjusting the desired temperature is very easy. The knob allows precise and immediate adjustments, offering a classic but highly effective control mode. Not only functional, but also aesthetically pleasing. Our thermostat features a modern, compact design that fits perfectly in any environment, adding a touch of style to your home or office.
ECDSKTS: Electric cable for use with DSKT control panel. Mandatory accessory when combined with ULSI_BR versions.
ECTXBIS: Electric cable for use with TXBI control panel. Mandatory accessory when combined with ULSI_BR versions.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).
TXBIS: Thermostat installation on the fan coil.

ULSI_B + DSKTS



AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF Components

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.
KITSVB: Installation support kit for the VMF-E19I thermostat, complete with wiring for the fan coil unit interface.
VMF-DSK: User interface with an easy-to-read light display that provides clear information on room temperature, programming settings and more. Thanks to the ergonomic ring nut switch, adjusting the desired temperature is very easy. The knob allows precise and immediate adjustments, offering a classic but highly effective control mode. Not only functional, but also aesthetically pleasing. Our interface features a modern, compact design that fits perfectly in any environment, adding a touch of style to your home or office. It is available in white (VMF-DSK) and black (VMF-DSKD).
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E19 or VMF-E19I accessory is required.
VMF-E3: Wall-mounted user interface, also controllable via VMF-IR control.
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with AER503IR, VMF-E3 thermostat.
VMHI: The VMHI panel can be used as a user interface. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

BCSV: Condensate collection tray, for valve kit.
DSC7: Condensate drainage device.
VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.
VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.
ZXS: Pair of stylish and structural feet.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	10	20	30	40	50
AER503IR (1)	ULSI_B,ULSI_BR	•	•	•	•	•
DSKTS (2)	ULSI_B,ULSI_BR	•	•	•	•	•
ECDSKTS	ULSI_BR	•	•	•	•	•
ECTXBIS	ULSI_BR	•	•	•	•	•
PRO503	ULSI_B,ULSI_BR	•	•	•	•	•
SA5 (3)	ULSI_B,ULSI_BR	•	•	•	•	•
SW5 (3)	ULSI_B,ULSI_BR	•	•	•	•	•
TX (4)	ULSI_B,ULSI_BR	•	•	•	•	•
TXBIS (5)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Wall-mount installation.
(2) For ULSI_BR units add the mandatory EC_DSKT accessory. Compatibility with VMF system.
(3) Probe for AER503IR-TX thermostats, if fitted.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
(5) For ULSI_BR units add the mandatory ULSI_BR accessory.

VMF system

Model	Ver	10	20	30	40	50
DI24	ULSI_B,ULSI_BR	•	•	•	•	•
DI24CP	ULSI_B,ULSI_BR	•	•	•	•	•
KITSVB	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-DSK	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E19I (1)	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E2S (2)	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E3	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-E4X	ULSI_B,ULSI_BR	•	•	•	•	•
VMF-IR	ULSI_B,ULSI_BR	•	•	•	•	•
VMHI	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Mandatory accessory.
(2) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

Model	Ver	10	20	30	40	50
VCS2 (1)	ULSI_B,ULSI_BR	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	ULSI_B	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	ULSI_B,ULSI_BR	•	•	•	•	•

Pair of stylish structural feet

Model	Ver	10	20	30	40	50
ZXS	ULSI_B,ULSI_BR	•	•	•	•	•

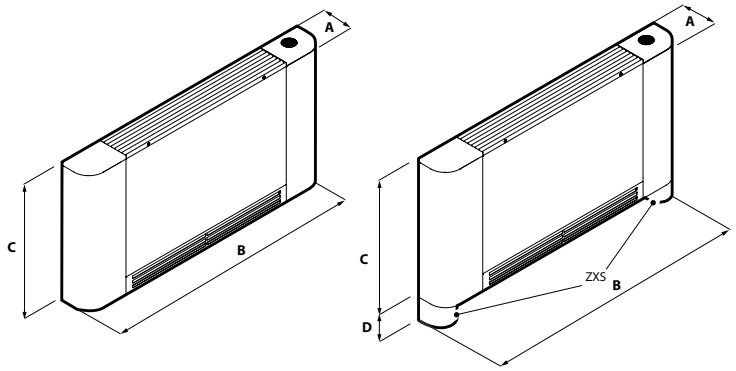
PERFORMANCE SPECIFICATIONS

2-pipe

		ULSI10B			ULSI20B			ULSI30B			ULSI40B			ULSI50B		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	0,70	1,14	1,53	1,27	1,88	2,86	1,88	2,91	3,72	2,32	3,55	4,77	2,49	3,85	5,73
Water flow rate system side	l/h	61	100	134	111	165	251	165	254	326	203	311	418	218	337	501
Pressure drop system side	kPa	2	4	7	5	10	20	6	14	22	6	13	22	5	10	21
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	0,35	0,57	0,76	0,63	0,94	1,43	0,94	1,45	1,85	1,15	1,77	2,38	1,24	1,92	2,85
Water flow rate system side	l/h	61	99	132	110	163	248	163	251	322	201	307	413	216	333	495
Pressure drop system side	kPa	2	4	7	5	9	20	6	14	22	6	13	22	5	10	21
Cooling performance 7 °C / 12 °C (3)																
Cooling capacity	kW	0,37	0,60	0,80	0,67	0,98	1,50	0,98	1,52	1,95	1,22	1,86	2,50	1,30	2,02	3,00
Sensible cooling capacity	kW	0,25	0,42	0,57	0,46	0,68	1,08	0,68	1,06	1,39	0,84	1,30	1,79	0,90	1,40	2,15
Water flow rate system side	l/h	63	103	137	114	169	257	169	261	335	209	319	429	224	346	515
Pressure drop system side	kPa	3	6	10	7	13	28	9	19	30	9	18	30	7	14	29
Fan																
Type	type	Tangential														
Fan motor	type	Inverter														
Number	no.	1			1			1			2			2		
Air flow rate	m^3/h	46	82	134	78	128	241	109	188	301	126	218	370	127	225	427
Input power	W	5	8	10	6	9	15	7	12	17	7	14	20	7	13	21
Signal 0-10V	%	40	70	90	40	70	90	40	70	90	40	70	90	40	70	90
Fan coil sound data (4)																
Sound power level	dB(A)	39,0	47,0	51,0	39,0	47,0	51,0	40,0	48,0	53,0	41,0	49,0	54,0	42,0	52,0	56,0
Sound pressure level	dB(A)	31,0	39,0	43,0	31,0	39,0	43,0	32,0	40,0	45,0	33,0	41,0	46,0	34,0	44,0	48,0
Finned pack heat exchanger																
Water content main heat exchanger	l	0,5			0,9			1,2			1,5			1,8		
Diametre hydraulic fittings																
Main heat exchanger	Ø	1/2"														
Power supply																
Power supply	V/Ph/Hz	230V~50Hz														

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT (listing FCU AERMEC 2025)
(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT (listing FCU AERMEC 2025)
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS



Size			10	20	30	40	50
Dimensions and weights							
A	ULSI_B,ULSI_BR	mm	130	130	130	130	130
B	ULSI_B,ULSI_BR	mm	745	940	1134	1328	1524
C	ULSI_B,ULSI_BR	mm	580	580	580	580	580
D	ULSI_B,ULSI_BR	mm	80	80	80	80	80
Empty weight	ULSI_B,ULSI_BR	kg	11	13	15	19	17

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